

**Uva Wellassa University of Sri Lanka**  
**Faculty of Applied Sciences**  
**Department of Computer Science and Informatics**  
**Assignment 01 –2023**  
**CST123-3 Database Management Systems**

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1. Consider the following relational database schema consisting of the three relation schemas:

Suppliers(sID, sName, address)

Parts(pID, pName, colour)

Catalog(sID, pID, price)

Answer the following questions using relational algebra queries;

- A. Find the names of all red parts.
- B. Find all prices for parts that are red or green. (A part may have different prices from different manufacturers.)
- C. Find the sIDs of all suppliers who supply a part that is red or green.
- D. Find the names of all suppliers who supply a part that is red or green.
- E. If sID is a key for the Suppliers relation, could it be a key for the Catalog relation?